

Facility Name: **Interfor U.S. Inc. – Swainsboro Sawmill**  
City: Swainsboro  
County: Emanuel  
AIRS #: 04-13-107-00011

Application #: TV-65711  
Date Application Received: December 11, 2017  
Permit No: 2421-107-0011-V-05-0

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## Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Facility Identification**

1. Facility Name: Interfor U.S. Inc. – Swainsboro Sawmill

2. Parent/Holding Company Name

Interfor U.S. Inc.

3. Previous and/or Other Name(s)

Champion International Corporation  
Rayonier Inc., Swainsboro Sawmill  
Rayonier Wood Products LLC, Swainsboro Sawmill

4. Facility Location

8796 Georgia Highway 297  
Swainsboro, Georgia 30401 (Emanuel County)

5. Attainment, Non-attainment Area Location, or Contributing Area

This facility is located in Emanuel County which is in attainment for all criteria pollutants.

**B. Site Determination**

There are no other facilities which could possibly be contiguous or adjacent and under common control.

**C. Existing Permits**

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2421-107-0011-V-04-0	June 13, 2013	Conversion of drying kiln DK08 into a continuous kiln DK10
2421-107-0011-V-04-1	August 1, 2016	Cancel conversion of batch kiln DK08 and increase its capacity to 85 MMBF/year and increase sawmill capacity to 195 MMBF/year. Add powered stacks to each end of continuous kiln DK09.

## D. Process Description

### 1. SIC Codes(s)

2421 – Saw Mills and Planing Mills - General

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

### 2. Description of Product(s)

This facility produces dried softwood dimensional lumber.

### 3. Overall Facility Process Description

#### **Sawmill**

The facility receives raw logs from tree harvesting operations. These logs are unloaded and stacked with an on-site crane. The majority of the logs are debarked and then cut to optimal length. The logs are then sawn to a rectangular shape. The slab ends, which have been cut off, are reduced to chips. The squared logs are then sawn with band and/or circular saws to the optimal dimensional lumber. This green lumber is then dried in one of the two drying kilns.

Bark from the debarker is mechanically conveyed to a bark holding bin for transportation to offsite purchasers. The sawing and chipping operation produces chips, which are sent to a chip bin for shipment offsite. The green sawdust is used for fuel in the gasifier kilns.

#### **Lumber Drying Kilns**

The kilns are direct fired lumber drying kilns. Each drying kiln has its own gasifier, combustion unit, and blend chamber. These units gasify green sawdust to supply the heat needed to dry lumber. The green rough-sawn lumber, having a free moisture content of approximately 50 percent, is stacked and fed continuously to drying kiln DK09 and in batches to drying kiln DK08 to approximately 19 percent moisture content.

#### **Planer Mill**

The dried lumber is placed in the planer mill, which smooths each surface on each board. The resulting shavings are pneumatically conveyed to a bin for transportation to purchasers. This pneumatic system is controlled with both a high efficiency cyclone and a baghouse. Sawdust and planer shavings are sold to particulate board manufacturers or for animal bedding and litter. The lumber is then graded and bundled for shipment.

## 4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

## E. Regulatory Status

## 1. PSD/NSR

The facility is a PSD major source for VOC emissions. The facility is also a major source of HAPs emissions.

## 2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM <sub>10</sub>	Yes			✓
PM <sub>2.5</sub>	Yes			✓
SO <sub>2</sub>	Yes			✓
VOC	Yes	✓		
NO <sub>x</sub>	Yes			✓
CO	Yes			✓
TRS	Yes			✓
H <sub>2</sub> S	Yes			✓
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

## 3. MACT Standards

The lumber drying kilns are an affected source as defined in 40 CFR 63.2292 and thus subject to 40 CFR 63 Subpart DDDD - "National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products" (PCWP MACT). Lumber drying kilns are not subject to the compliance options or work practice requirements of the PCWP MACT. The only requirement is the initial notification, which the facility submitted in December 2004.

## 4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
Program Code 8 – Part 61 NESHAP	No

Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

**Regulatory Analysis****II. Facility Wide Requirements****A. Emission and Operating Caps:**

None applicable.

**B. Applicable Rules and Regulations**

Not applicable.

**C. Compliance Status**

No noncompliance issues have been identified by the facility or by review of facility compliance files at EPD.

**D. Permit Conditions**

None applicable.

### III. Regulated Equipment Requirements

#### A. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
DK08	Existing lumber drying kiln (batch), direct heated by green sawdust fired gasifier (85 MMBF/year capacity)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4., 7.14.1, 7.14.2	N/A	None
DK09	Continuous type lumber drying kiln, direct heated by green sawdust fired gasifier (110 MMBF/yr capacity)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4	N/A	None
PM01	Planer Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 6.1.7, 6.2.4	PMC1	Planer Mill Baghouse

\* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

#### B. Equipment & Rule Applicability

Equipment and Rule Applicability for this renewal permit is based on the requirements for the drying kilns and planer mill permitted in Permit 2421-107-0011-V-04-0 and modified in Permit Amendments 2421-107-0011-V-04-1.

#### Emission and Operating Caps:

The production from the batch drying kiln is limited to 85 MMBF/year and the production from both drying kilns is limited to 195 MMBF/year based on the PSD review and BACT analysis the facility went through in its last PSD permit amendment in 2016.

#### Rules and Regulations Assessment:

##### 40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

The lumber drying kilns are an affected source as defined in 40 CFR 63.2292 and thus subject to 40 CFR 63 Subpart DDDD - “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products” (PCWP MACT). Lumber drying kilns are not subject to the compliance options or work practice requirements of the PCWP MACT. Therefore, the facility is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this MACT. The only requirement is the initial notification, which the facility submitted in December 2004.

391-3-1-.02(2)(b) – Visible Emissions

All of the emission units at Rayonier Wood Products, Swainsboro Sawmill, including the lumber drying kilns and planer mill, are subject to Georgia Rule (b). Rule (b) limits the opacity of visible emissions from any air contaminant source that is subject to some other emission limitation under 391-3-1-.02(2). The opacity of visible emissions from regulated sources may not exceed 40 percent under this general visible emission standard.

Georgia Rule (e) – Particulate Emission from Manufacturing Processes

All of the emission units at Rayonier Wood Products, Swainsboro Sawmill, including the lumber drying kilns and planer mill, are subject to Georgia Rule (e). The Rule (e) emission limit is calculated using one of the following equations based on the production of the emission unit:

$E = 4.1 P^{0.67}$ ; for process input weight rate up to and including 30 tons per hour.

$E = 55 P^{0.11} - 40$ ; for process input weight rate above 30 tons per hour.

Where E equals the allowable emission rate in pounds per hour and P equals process input weight rate in tons per hour.

Georgia Rule (g) – Sulfur Dioxide

Each of the lumber drying kilns burns green sawdust and, therefore, is subject to Georgia Rule (g). Rule (g) limits the sulfur of fuel burned to 2.5 percent by weight. Green sawdust is inherently low in sulfur, so Rayonier will easily comply with Rule (g).

### C. Permit Conditions

Condition 3.3.1 states the general applicability of 40 CFR 63 Subparts A and DDDD, the plywood and composite wood product MACT. This MACT is applicable to the two drying kilns at the facility. The only requirement under this MACT for existing drying kilns is a one-time notification requirement that has been complied with in 2006.

Condition 3.4.1 contains the requirements of Rule (e).

Condition 3.4.2 contains the requirements of Rule (b).

Condition 3.4.3 contains the requirements of Rule (g).

Condition 3.5.1 requires that an inventory of filter bags be available to replace defective bags. This requirement will minimize emissions, which helps assure compliance with Rule (b) and Rule (e).

Condition 3.5.2 requires that routine maintenance be done on all air pollution control equipment and that records be maintained for inspection. This condition is based on Rule 391-3-1-.02(2)(a)10.

Condition 3.5.3 requires the Permittee to implement a Work Practice and Preventive maintenance program for the drying kilns at the facility.

#### **IV. Testing Requirements (with Associated Record Keeping and Reporting)**

##### **A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

##### **B. Specific Testing Requirements**

Not applicable.

#### **V. Monitoring Requirements**

##### **A. General Monitoring Requirements**

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

##### **B. Specific Monitoring Requirements**

The planer mill PM01 is subject to Rules (b) for Visible Emissions and (e) for Particulate Matter (PM). This planer mill uses a baghouse to collect shavings and to control PM emissions. The baghouse and cyclone are subject to inspection monitoring and record keeping. To make certain that the baghouse and cyclone are operating properly, a daily visible emissions check and weekly visual inspections are required, any malfunctions must be corrected in a most expedient matter.

Lumber drying kilns DK08 and DK09 are subject to Rules (b) for Visible Emissions and (e) for Particulate Matter (PM). No control equipment is present on these drying kilns; however, PM emissions from these units are low and it is very unlikely that PM and opacity limitations will be exceeded. Therefore, no monitoring is required.

The gasifiers for lumber drying kilns DK08 and DK09 are subject to the 2.5 percent sulfur limit in Rule (g) for Sulfur Dioxide. The gasifiers will burn only woodchips and sawdust. These fuels have very low levels of sulfur which are well below the Rule (g) limit of 2.5 percent sulfur by weight. Monitoring of fuel sulfur is, therefore, not necessary to show compliance with Rule (g).

Condition 5.2.1 requires the Permittee to install a device to monitor the pressure drop across the planer mill baghouse PMC1.

Condition 5.2.2 requires weekly operational and maintenance checks for the cyclone received material from the planer mill.



Condition 5.2.3 requires daily visible emission (VE) checks on the emissions from the planer mill baghouse PMC1.

Condition 5.2.4 requires a Preventive Maintenance Program for the planer mill baghouse PMC1.

C. Compliance Assurance Monitoring (CAM)

CAM is not applicable to Interfor's Swainsboro sawmill since pre-control PM emission from the planer mill baghouse (PMBH) is less than the Title V major source threshold of 100 tons per year.

## **VI. Record Keeping and Reporting Requirements**

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.1.7 contains the excess emissions, exceedances, and excursions that must be reported semiannually by the Permittee.

Condition 6.2.1 requires the Permittee to keep records of the lumber dried in each lumber drying kiln to verify compliance with production limits in Condition 3.2.1.

Condition 6.2.2 requires a report if monthly production exceeds 1/12<sup>th</sup> of the applicable annual production limits.

Condition 6.2.3, which requires the Permittee to submit semiannual reports of the monthly amounts of lumber dried in the drying kilns.

Condition 6.2.4 requires the Permittee keep records of actions taken to reduce fugitive dust at the facility.

**VII. Specific Requirements****A. Operational Flexibility**

None applicable.

**B. Alternative Requirements**

None applicable.

**C. Insignificant Activities**

Refer to <http://gatv.georgiaair.org/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

**D. Temporary Sources**

None applicable.

**E. Short-Term Activities**

None applicable.

**F. Compliance Schedule/Progress Reports**

None applicable.

**G. Emissions Trading**

None applicable.

**H. Acid Rain Requirements**

None applicable.

**I. Stratospheric Ozone Protection Requirements**

None applicable.

**J. Pollution Prevention**

None applicable.

**K. Specific Conditions**

None applicable.

**VIII. General Provisions**

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

**Addendum to Narrative**